



Book review of *The New Landscape of Mobile Learning: Redesigning Education in an App-Based World*

The New Landscape of Mobile Learning: Redesigning Education in an App-Based World, Charles Miller & Aaron Doering (Editors), New York: Routledge, March 8, 2014, 1st Edition, 374 pages, ISBN-13: 978-0-203-10842-0 (e-book).

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Introduction

Mobile learning is a topic of great interest to researchers and practitioners alike. Even though mobile integration and the adoption of mobile tools is occurring, the realization of widespread mobile learning has not truly materialized in academia. One factor affecting the adoption of mobile learning is the lack of a formal definition. Without formally defining the term, educators struggle how to integrate mobile devices for effective learning since researchers have yet to develop a workable mobile learning framework or even a set of best practices. Miller and Doering think that a fundamental aspect to mobile learning is mobility, which is the ability to freely move about and collaborate in an authentic environment in which learners gain insight and construct knowledge.

To communicate the potential of mobile learning, the editors use the analogy of an iceberg. On the surface, only certain aspects of the educational process are visible. The editors explain that learning is a complex process which is built from pedagogical foundations that integrate social interactions with technology. It is through the lens of this foundational layer that the editors are challenging the reader to view mobile learning. The editors divided the book into four main sections authored by experts in various aspects of mobile learning. The sections are (a) The Emerging Role of Mobile Learning, (b) Mobile Learning Design Guidelines and Frameworks, (c) Mobile Learning Design and Development Narratives, and (d) Mobile Learning Integration, Research, and Evaluation. The editors added a final section in which they explore the future of mobile learning. The chapters in each section provide a note to address the three different audiences, which are a designer, a teacher, and a researcher.



Content

Section 1: The Emerging Role of Mobile Learning

The authors of this section explain that one of the challenges instructional designers face in using mobile devices is to find the appropriate use of the technology. Technology use can easily become an overpowered method of accomplishing simple tasks. Only through appropriate use will technology transform education. These authors focus on mobile applications as the emerging role of mobile learning in education, with a connectivist view. The focus is not on using mobile devices as a tool which educators use to deliver learning materials. Rather, mobile technologies can help the learner create meaning from the knowledge when learned through activities where the knowledge is connected, opposed to facts and procedures. In this context, the role of the mobile application is

to augment learning and increase learning performance. The authors explain how application designers can use behaviorist principles to augment learning by providing rewards, instant feedback, and personalized learning. This section includes an outstanding chart on the relationship between the desired instructional focus and design principle. The chart connects the instructional focus to mobile application examples, to learning theories, and finally to instructional design principles.

Section 2: Mobile Learning Design Guidelines and Frameworks

While a typical mobile learning scenario consists of a replication of traditional learning systems, the authors of this section offer a practical look at mobile learning design guidelines and frameworks. Their guidelines apply to design considerations for mobile learning applications and mobile media used for learning. Like in the case of mobile learning theories, little has been written on mobile learning design. The authors explain the first step in designing mobile applications is to understand how they differ from the traditional methods and embrace the characteristics of mobile technology. Embedded within mobile usage is the need to have a mobile literacy, which is being able to effectively navigate mobile computing. Mobile literacy changes our very nature. Educators need to redefine learning within mobile learning environments as mobile technology renders things obsolete such as memorizing terms due to increased access.

Section 3: Mobile Learning Design and Development Narratives

Mobile learning systems have not been widely studied in peer-reviewed design-based research articles. This section contains lessons learned from designers as they created their own iPad applications. The first group of designers developed applications for children working with letters and numbers. For these applications, the designers focused on a design which joined aesthetics and pedagogy with an attentiveness to simplicity. They did not design their iPad applications for the transmission of knowledge, but for leading the learners to be innovators and creators. The next group of designers walked the readers through how they created an augmented reality mobile application using a specific design pattern. These authors explained how they developed the user interface using pencil and paper to help visualize they desired outcome. A third group of designers detailed their application design process, which is a circular eight-step process.

Section 4: Mobile Learning Integration, Research, and Evaluation

This section moves the reader a step closer in understanding the issues surrounding mobile learning, largely using the iPad. The authors explore how to integrate mobile applications and then they explain the challenges. They explain how one should not look at application integration through the lens of traditional educational tools, but through the context of social and personalized learning, as is the mode of learning represented by mobile applications. In addition, educators should evaluate mobile applications for accessibility. Once applications are integrated, the authors addressed advantages and disadvantages of mobile devices. Advantages include augmented reality, simulations, immediate feedback, and the ability to record and capture data. The primary disadvantages are academic honesty and distractions that include cheating, accessing the internet, playing video games, taking pictures or screenshots of exams, or using them as inappropriate communication devices.

Conclusion

The book is very practical as the editors did an outstanding job of providing information about integrating mobile devices into specific areas to assist or augment learning. While the book provided insight into the field of mobile learning, it leaves the reader with additional questions as to what

researchers mean by mobile learning. The editors tried to address these ambiguities and put forth solutions, but the book represents the fragmented problems of mobile learning as the book itself is fragmented. Researchers often explain mobile learning as a separate field of learning, but this does not fit the reality of how mobile learning is used. Instead, the actual use of mobile learning often represents mobile integration. Just because one takes notes on a tablet in class or uses a mobile application for learning, they are not necessarily engaging in mobile learning. Rather, they are using available technology to augment their learning. Another criticism of the book is that some of the authors took a biased, or perhaps a convenient approach to Apple's devices, and one could get the idea that mobile learning is only for 'i' devices. Comments and related thoughts such as "iPads are the next chapter" (loc. 1473) or "ways of maximizing the iPod, iPhone, and iPad's features in support of learning" (loc. 595) were too common. I appreciated the other authors who took a neutral or more inclusive approach to the type of device as one stated that "tablet computers like the iPad seem to be well-suited for educational purposes" (loc. 5278). This book greatly contributes to the field of mobile learning by providing a greater look at mobile learning through a connectivist view and provides various ways of using mobile devices to support learning.